



# UNITED STATES DEPARTMENT OF COMMERCE

## United States Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

RECEIVED  
COMMERCIAL  
AND DELIVERED TO THE  
PATENT OFFICE

EXAMINER
----------

ART UNIT	PAPER NUMBER
----------	--------------

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

08/950,963

Applicant(s)

DREWES ET AL.

Examiner

Jeffrey Lundgren

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 13-17 and 35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 18-34 and 36-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. Claims 18, 19, and 23, are rejected under 35 U.S.C. 102(b) as being anticipated by Brecht *et al.* (Anal. Chim. Acta 311, 289-299, **1999**) for the reasons made of record in the Office action mailed on September 3, 1999 (paper No. 7).

Applicants argue that Brecht does not teach all of the limitations. This is not found persuasive for the reasons below.

Brecht teaches a device wherein the sample traverses the analyte receptive layer by laminar flow (see page 292; *Setup*), wherein laminar flow occurs "across the surface/support of the device", which is how Applicants' limitation "through the layers" is interpreted for the reasons described in the rejection below under 35 U.S.C. § 112, second paragraph.

The instant rejection is withdrawn from claims 1-12, 20-22, 24-34, and 36-50, for reasons other than those argued by Applicants. Specifically, the device of Brecht does not teach channels (such as in more than one channel), but only a single channel.

2. The rejection of claims 3-6, 9, 21, 22, 25, and 26, under 35 U.S.C. 102(b) as being anticipated by Kline *et al.* (U.S. Patent No. 5,459,078, October 17, 1995) in the Office Action mailed on September 3, 1999, are withdrawn in view of the arguments presented by Applicants during the telephone interview between Applicants and the Examiner on October 13, 2000, and the arguments presented in the response received on February 7, 2000.

### ***Claim Rejections - 35 USC § 103***

3. The rejection of claim 7 under 35 U.S.C. 103(a) as being unpatentable over Brecht *et al.* (Analitica Chimica Acta 311, 289-299 **1995**), in view of Goddard *et al.* (Analyst 119, 583-588, **1994**), is withdrawn for the reasons above in paragraph 1.

4. The rejection of claims 8, 10-12, 27-34, and 37, under 35 U.S.C. 103(a) as being unpatentable over Brecht *et al.*, in view of Goddard *et al.* as applied to claim 7 above,

and further in view of Beuchler et al. (U.S. Patent No. 5,458,852, October 17, 1995) in view of Finlan (U.S. Patent No. 5,055,265, October 8, 1991), is withdrawn for the reasons above in paragraph 1.

5. The rejection of claims 38-50, under 35 U.S.C. 103(a) as being unpatentable over Brecht et al. (Anal. Chim. Acta 311, 289-299, **1999**) in view of Goddard et al. (Analyst 119, 583-588, **1994**) in light of Kimock et al. (U.S. Patent No. 5,637,353, June 10, 1997), is withdrawn for the reasons above in paragraph 1.

### **New Grounds of Rejection**

#### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-12, 18-34, and 36-50 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-12, 18-34, and 36-50, are indefinite for reciting the phrase "through layers of the device" in the context of the claimed limitations, because the skilled artisan could not determine the metes and bounds of the claim by two different interpretations. Although the phrase "through layers of the device" is defined in the specification on page 11, the phrase is indefinite in the context of a device which has laminar flow. The claim phraseology is defined by "flow of the sample *through the layers from the surface of the device toward the support* and flow across the surface of any layer of the device", such as a perpendicular flow with respect to the plane of the device. However, since the invention is drawn to a device for providing laminar flow, it is unclear how the flow pattern is directed "through layers", such as from the surface toward the support (i.e.,

Art Unit: 1631

perpendicular flow), because laminar flow occurs when a stream of fluid moves like a plurality of laminae or sheets parallel to the surface, not *perpendicular* to the surface. Applicants' flow *away from* or *towards* the surface (or any given support/substrate) contradicts the definition of laminar flow. Applicants are referred to Burstein *et al.* (U.S. Patent No. 4,685,534, August 11, 1987; see column 9:20-25), Dobak, III *et al.* (U.S. Patent No. 6,096,068, August 1, 2000; see column 8:10-22).

Claims 1-12, 18-22, and 36-50, recites the limitation "through *the layers*" in region between the support and the optically functional layer. However, in this region there is only a single layer in this region (i.e., the optically functional layer), and it is not clear which other layers Applicants are claiming, therefore, there is insufficient antecedent basis for this limitation in the claim.

Claims 23-34 recites the limitation "said layers", in region between the support and the optically functional layer. However, in this region there is only a single layer in this region (i.e., the optically functional layer), and it is not clear which other layers Applicants are claiming, therefore, there is insufficient antecedent basis for this limitation in the claim.

### **Conclusion**

8. No claims are allowable.

9. Any inquiries concerning the *merits* of this communication or earlier communications from the Examiner should be directed to Jeffrey S. Lundgren, whose telephone number is (703) 306-3221. The Examiner can normally be reached on Monday-Friday from 7:00 AM to 5:00 PM (EST).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Dr. Michael Woodward, can be reached at (703) 308-4426.

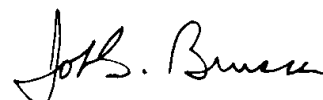
Any inquiries of a *general* nature relating to this application should be directed to Ms. Pauline Farrier, Patent Analyst for Art Unit 1631, whose telephone number is (703) 305-3550.

Art Unit: 1631

Papers related to this application may be submitted by facsimile transmission. Papers should be faxed to Group 1631 using (703) 308-0294. Please notify the Examiner of incoming facsimiles prior to sending papers to the aforementioned fax number. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG (November 15, 1989).



Jeffrey S. Lundgren, Ph.D.



JOHN S. BRUSCA, PH.D.  
PRIMARY EXAMINER